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Conference Abstract

Requirement Analysis for the DiSSCo Research Infrastructure

Niels Raes[‡], Emily van Egmond[§], Wouter Addink[‡,|,¶], Alex Hardisty[#]

‡ Naturalis Biodiversity Center, Leiden, Netherlands
§ Free University, Amsterdam, Netherlands
| Distributed System of Scientific Collections - DiSSCo, Leiden, Netherlands
¶ Species 2000 Secretariat, Leiden, Netherlands
# School of Computer Science & Informatics, Cardiff University, Cardiff, United Kingdom

Corresponding author: Niels Raes (nlbif@naturalis.nl)

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Abstract

DiSSCo – the **Di**stributed **S**ystem of **S**cientific **Co**llections – will mobilise, unify and deliver bio- and geo-diversity information at the scale, form and precision required by scientific communities, and thereby transform a fragmented landscape into a coherent and responsive research infrastructure. At present DiSSCo has 115 partners from 21 countries across Europe. The DiSSCo research infrastructure will enable critical new insights from integrated digital data to address some of the world's greatest challenges, such as biodiversity loss, food security and impacts of climate change. A requirement analysis for DiSSCo was conducted to ensure that all of its envisioned future uses are accommodated through a large survey using epic user stories. An epic user story has the following format:

As [e.g. scientist] **I want to** [e.g. map the distribution of a species through time] **so that I** [e.g. analyse the impact of climate change] **for this I need** [e.g. all georeferenced specimens records through time]

Several consultation rounds within the ICEDIG community resulted in 78 unique user stories that were assigned to one, or more, out of seven recognized stakeholder categories:

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1. Research,
2. Collection management,
3. Technical support,
4. Policy,
5. Education,
6. Industry, and
7. External.

Each user story was assessed for the level of collection detail it required; four levels of detail were recognised: Collection, Taxonomic, Storage unit, and Specimen level. Furthermore, it was assessed whether the future envisioned use of digitised natural history collections were possible without the DiSSCo research infrastructure.

Subsequently 1243 identified stakeholders were invited to review the DiSSCo user stories through a Survey Monkey questionnaire. Additionally, an invitation for review was posted in several Facebook groups and announced on Twitter. A total of 379 stakeholders responded to the invitation, which led to 85 additional user stories for the envisioned use of the DiSSCo research infrastructure. In order to assess which component of the DiSSCo data flow diagram should facilitate the described user story, all user stories were mapped to the five phases of the DiSSCo Data Management Cycle (DMC), including data:

1. acquisition,
2. curation,
3. publishing,
4. processing, and
5. use.

At present, the user stories are being analysed and the results will be presented in this symposium.

Keywords

DiSSCo, ICEDIG, research infrastructure, user story, data management cycle

Presenting author

Niels Raes

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